



Post Incident Analysis for 10109 Lorain Ave

Single Family House Fire June 29th, 2009 10109 Lorain Ave FS16's area



- Report of one trapped
- One injured civilian
- Four injured Fire Fighters
- Fire in basement
- House had been divided into three separate living units



Post Incident Analysis for 10109 Lorain Ave

Table of Contents

Executive Summary-----	3
Incident Statistics -----	3
Site & Structure Layout-----	4
Fire Code History & Fire Systems-----	5
Unit Breakdowns -----	5
Initial On-Scene Report and Command -----	6
Communications -----	7
On Scene Operations -----	7
Water Supply -----	8
Tactical Positioning -----	9
Initial Attack Line Deployment -----	9
Accountability -----	9
Rapid Intervention -----	10
Crew Integrity -----	10
Lessons Learned -----	10
Maps or Preplans -----	11



Post Incident Analysis for 10109 Lorain Ave

Executive Summary

At 1125 on June 29th, 2009, units were dispatched for a house fire with a report of "one trapped" at 10109 Lorain Ave. BC701 was the first unit on the scene, and found fire showing from a basement window on side Alpha and smoke showing from multiple points. Suppression units were able to put a line between the fire and the unburned part of the house while the search was completed on floors 2 and 1. The search was negative, but one occupant was injured while evacuating the building.

The initial entry team found high temperatures and heavy smoke on the first floor, but was able to find and protect the top of the basement stairs. The 3rd engine stretched a line to the basement entrance on side Charlie, and also experienced very high heat while extinguishing the seat of the fire. The rescue squad arrived very early in the incident and initiated the search group, with assistance from the 5th due engine. These defined efforts allowed a rapid search of the likely areas for a rescue to be made, had there been any occupants.

A RID and Task Force were dispatched on the incident, and all companies had assignments during the incident.

According to the FEI, the cause was a sudden failure of the circuit breaker box in the basement.

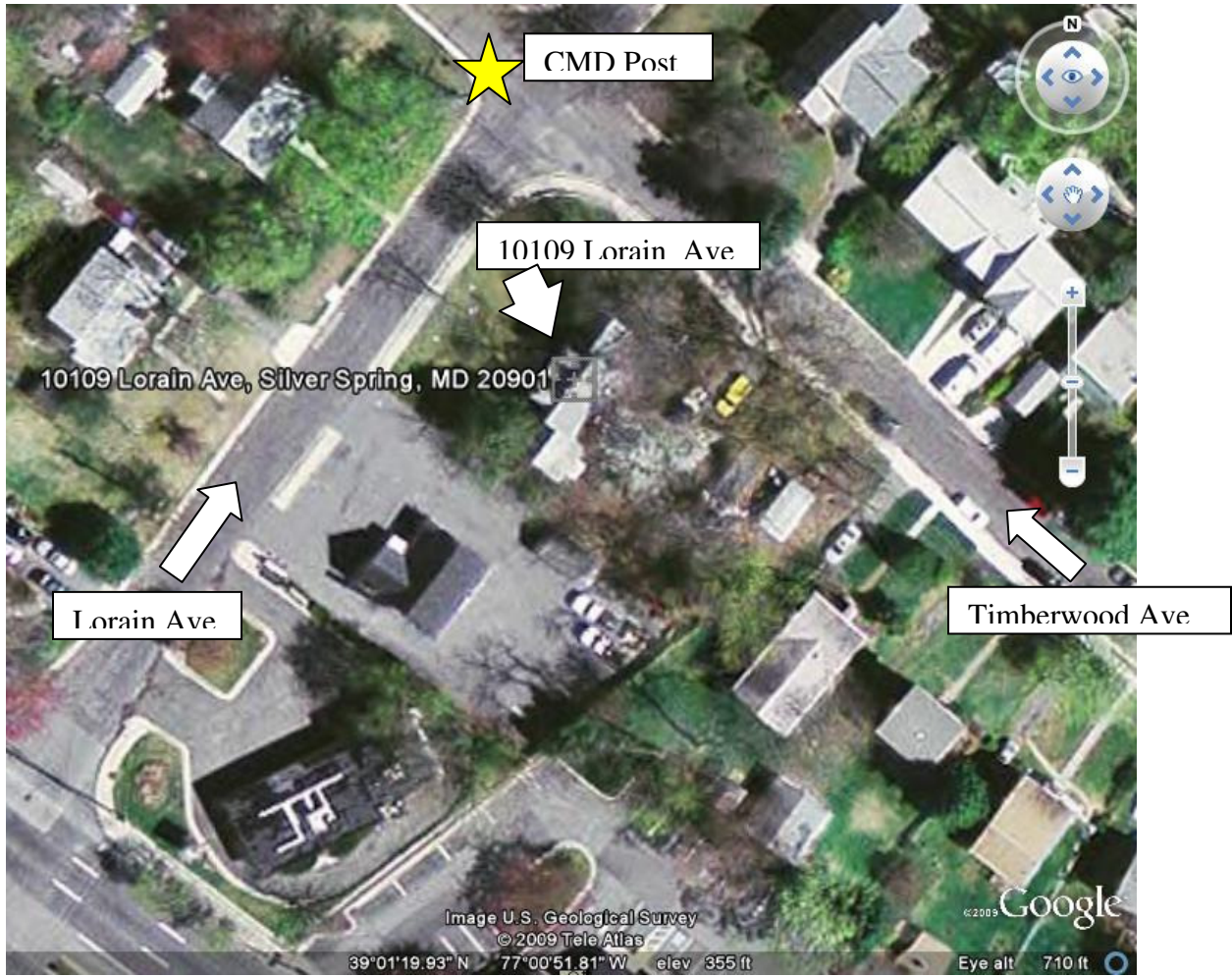
Incident Statistics

- 68 Personnel
- 7 Engines
- 4 Truck Company's
- 2 Rescue Squads
- 3 BLS Units
- 2 ALS Units
- 5 Chief Officers
- 2 Support Units)
- \$250,000 loss to structure
- \$100,000 loss to contents



Post Incident Analysis for 10109 Lorain Ave

Site & Structure Layout



- Single family home on corner lot with main entrance facing side Alpha.
- Two story cape cod with basement walk out to side Charlie
- Hydrants that could be accessed with straight lays were on University Blvd W and Timberwood Ave.
- Brick and block construction with wood frame interior walls, floors, and roof.
- Building had been subdivided into three living units, each rented to separate tenants with a shared kitchen.
- The two stairways were stacked, and ran from the center of side Alpha up to the center of side Charlie.
- A wood deck was attached to the side Charlie with an entry door to the kitchen on the first floor, and exterior stairs down to the basement entry level.



Post Incident Analysis for 10109 Lorain Ave

Fire Code History & Fire Systems

- The code review of this structure is undetermined.
- There were smoke detectors present, but it is unknown if they activated. The detectors were hard wired with a battery back-up.
- There were no suppression systems, such as sprinklers, installed in the structure.

Unit Breakdown

(XXXX signifies no status or bad status)

	<u>Dispatch Time</u>	<u>On Scene Time</u>
<u>Box</u>		
E716	1125	XXXX
E701	1125	XXXX
E719	1125	1131
E712	1125	1131
E715	1125	1131
T701	1125	1133
T719 (Reserve tiller)	1125	1131
RS715 (Replaced by RS742)	1125	Cancelled
RS742	1126	XXXX
A716	1125	XXXX
M701	1128	1134
BC701	1125	1126
BC704	1125	1147
SA700	1125	1208
<u>RID</u>		
T712	1128	1132
RS715	1128	1139
M712	1128	XXXX
<u>Task Force</u>		
E702	1138	1143
E724	1138	1141
TK834	1138	XXXX
CT740	1138	FTR
AR733	1138	XXXX
<u>Special Alarms</u>		
A701	1128	1135
EMS702	1137	1141



Post Incident Analysis for 10109 Lorain Ave

M715	1126	XXXX
CT705	1145	XXXX
A712	1211	1220

Chief Officers

C701B	1125	1157
DC700	1125	1205

Fire Marshals

FM62	1133	XXXX
FM59	1133	XXXX
FM67	1133	XXXX

Initial On-Scene Report and Command

- BC701 on scene confirms address, reports fire showing from a basement window on side Alpha, announced location of ICP and established Command.
- Command confirmed dispatch of RID.
- T719 positioned on side Bravo with a view of side Charlie, confirmed exterior basement entrance, and reported fire showing from 2nd floor of side Charlie (later found to be 1st floor).
- Command confirmed that E716 was following the SOP for basement fires by protecting top of stairs.
- Command originally directed E701 to make attack in basement, and then redirected them to back up E716.
- Command directed E719 to make attack in basement.
- C701B on scene, assigned to Basement Division Supervisor
- RS742 assigned as Search Group Supervisor.





Post Incident Analysis for 10109 Lorain Ave

Side Charlie

Communications

- Communications dispatched the incident on 7A.
- Communications assigned the event to incident talk group 7C.
- Task Force units were assigned to 7D.
- Radio traffic was manageable and a few units had to wait for air time.
- VRS was activated by BC701 but not used.

On-Scene Operations

- The first alarm units followed the SOP for Safe Structural Fire Fighting, section X.
- The following divisions or groups were established:
 - Division 1
 - Division 2
 - Basement Division
 - Search Group
 - Rapid Intervention Group
 - Rehab
- The initial incident objectives followed the RECEO (Rescue, Exposure, Confinement, Extension, and Overhaul) plan.

Water Supply

- Two hydrants were used for this incident.
- The 1st engine intended to lay out from a hydrant at 10101 Lorain Ave and announced those instructions. But due to a discrepancy in the water supply map, they hydrant was missed (the hydrant was actually located on University Blvd W). The engine driver had to “hand jack” a 4” supply line to the hydrant. The 2nd engine picked up the hydrant and charged the supply line. This correction is in progress, but it is unknown how many copies of the map with errors are in circulation.
- 3rd engine also had a discrepancy in their maps and “hand jacked” a 4” supply line to the hydrant in the 300 block of Timberwood Ave. It is



Post Incident Analysis for 10109 Lorain Ave

unclear what caused this discrepancy. The 4th engine positioned at that hydrant and charged the supply line.



Tactical Positioning

- The 1st engine positioned on side Alpha
- The 3rd engine position on Timberwood Ave on side Bravo with a view of side Charlie.
- The 1st truck positioned on side Alpha, fairly close to the building.
- The 2nd truck positioned on Timberwood Ave.
- The 1st arriving rescue squad positioned nearby, but without impeding access to any other units.
- The task force was staged at the Four Corners Safeway, two engines were used for overhaul tasks, the balance was returned.
- EMS units ended up parking a long distances from the scene. These distances were increased because of the delay in recognizing the burns to



Post Incident Analysis for 10109 Lorain Ave

the firefighters. All patients were ambulatory, but had there been high priority patients this would have delayed care and transport.

Initial Attack Line Deployment

- There were a total of four hand-lines deployed on this fire with only two actually flowing water.
- The 1st engine pulled a pre-connected line through the front door.
- The 2nd engine believed they were to report to the basement entrance on side Charlie and pulled a pre-connected line from the 1st engine to the rear.
- The 3rd engine pulled a pre-connected line from their unit into the basement via the entrance on side Charlie.
- The 5th engine pulled a pre-connected line from the 1st engine to side A.

Accountability

- Personal accountability tags (PAT) were used but not collected by command.
- Daily line-ups for Battalion One were on hand by command, but not referred to.
- There was a Personnel Accountability Report (PAR) 28 minutes into the incident.

Rapid Intervention

- The 4th engine was the Rapid Intervention unit and positioned on side Alpha after viewing sides Charlie and Bravo. They were assigned as the RIG supervisor and T712 and RS715 reported to them.

Crew Integrity

- Based on brief interviews after the incident, it appears that crew integrity was utilized by all entry teams.



Post Incident Analysis for 10109 Lorain Ave

- The injuries to 4 firefighters could cast doubt on the full use of Crew Resource Management. Among the initial entry team on the 1st floor, all 3 personnel received burns. During discussions after the incident, personnel recalled recognizing the heat and switching positions around on the hose line. Were it not for the likelihood of a rescue, they would have lowered their risk exposure.

Lessons Learned

Command

- Command officers need drivers 24 hours a day. On this incident, BC701 was staffed with 2 personnel: A Captain who was interning as a Battalion Chief “bump up” handled most of the command responsibilities, and a certified command officer provided mentoring and oversight.
- Early arrival of a Battalion Chief increases the continuity of command and allows for a comprehensive strategy to be communicated to unit officers.

Communications

- Every assignment given by command must be acknowledged by repeating the recipient’s unit number and the message that was sent (ie. “E732 is OK on reporting to Division 3.”) For instance, the 2nd engine was originally directed to the basement, but then that assignment was changed to Division 1, and acknowledged. The 2nd engine misunderstood the message, acknowledged it, and complied with the direction they thought they had been given.

Operations

- For basement fires, training should reinforce the benefits of using a protected location to prevent fire spread up the interior stairs. As evidenced by several incidents in our County, working above a fire is among the most dangerous activities we perform, and should be minimized. On this incident, confinement could have been accomplished from the entry door from the deck on side Charlie. In this case, the likelihood of a rescue may have justified the increased exposure to risk of the entry team.
- Water supply maps must be up to date and drawn to scale. Both the 1st and 3rd engines were forced to “hand jack” supply lines. Even in established neighborhoods, errors can be found. Fortunately, our crews responded quickly to these changes.



Post Incident Analysis for 10109 Lorain Ave

Preplan or Maps

